Moov/Navman Spirit Series

Hardware Manual

Important safety information

PLEASE READ CAREFULLY BEFORE INSTALLING PRODUCT IN VEHICLE

⚠	This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.
⚠WARNING	WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
⚠CAUTION	CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.
CAUTION	CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

⚠WARNING

Removing original equipment, adding accessories or modifying your vehicle could affect the vehicle's safety or make it illegal to operate in some jurisdictions.

Follow all product instructions and all instructions in your vehicle owner's manual regarding accessories or modifications.

Consult your country's and/or state's laws regarding operation of a vehicle with any accessories or modifications.

It is your sole responsibility to place, secure and use your Mio in a manner that will not cause accidents, personal injury or property damage. Always observe safe driving practices.

Do not mount your Mio in a way that may interfere with the safe operation of the vehicle, the deployment of air bags or other safety equipment.

Do not operate your Mio while driving.

Before you use your Mio for the first time, familiarize yourself with your device and its operation.

On main roads, the distance to an exit calculated by your Mio may be further than the distance shown on road signs. Road signs show the distance to the start of an exit while your Mio shows the distance to the next intersection, i.e., the end of the exit ramp or road. To prepare to exit a road, always follow distance information on road signs.

The use of information regarding safety or speed camera locations may be subject to local laws in the country of use. You are responsible for checking that you can legally use the information in your country or in the country where the information will be used.

Products with FM Transmitter feature may be operated in the following countries: AD, AT, BE, DK, FI, DE, IE, LI, LU, MC, NL, NO, PT, SM, ES, SE, CH, GB & VA. The FM Transmitter is not allowed to be used by law in France, Andorra, San Marino, and Vatican City. Please turn off the FM Transmitter in those areas.

The TV, video player and AV input features MUST NOT be used when driving. Using this feature may cause an accident. Please make sure you comply with this warning. Mio accepts NO liability whatsoever in this regard.

⚠CAUTION

Do not handle your Mio while it is hot. Let the product cool, out of direct sunlight.

At full power, prolonged listening to your Mio via headphones or earphones can damage the ear of the user.

CAUTION

Do not expose your Mio to direct sunlight in an unattended vehicle for prolonged periods. Overheating may damage the unit.

To discourage theft, do not leave your Mio, mounting bracket or any cables in plain view in an unattended vehicle.

Warning Notice to Drivers in the United States

State law may prohibit drivers in states such as Arizona, California and Minnesota from mounting objects on their windshields while driving. Please make sure you research and follow your most current State laws. An alternative mounting option may be provided in the box with your product; or see our website for additional mounting alternatives. Mio does not take any responsibility for any fines, penalties, or damages that may be incurred as a result of disregarding this notice.

Home charger-specific safety information

To charge your Mio from the mains power, use the home charger (Model: MII050100; Input: 100-240V AC 50-60Hz; Output: 5V DC 1A Max) supplied by Mio as an accessory (may be sold separately). Using other home chargers with your Mio could result in serious injury or property damage.

Never use the charger if the plug or cord is damaged.

Do not expose the charger to moisture or water. Do not use the charger in a high moisture environment. Exposure to water may cause electrical sparks or fires.

Never touch the charger when your hands or feet are wet.

Allow adequate ventilation around the charger when using it to operate your Mio or charge the internal battery. Do not cover the charger with paper or other objects that will reduce ventilation. Do not use the charger while it is inside a carrying case or other container.

Ensure that the charger is connected to a power source with the correct fitting and voltage requirements. The voltage requirements can be found on the home charger casing and/or packaging.

Do not attempt to service the charger as this could result in personal injury. Replace the charger if it is damaged or exposed to excess moisture.

Internal battery-specific safety information

Your Mio contains a non-replaceable internal lithium-ion polymer battery. The battery may burst or explode if mishandled, releasing hazardous chemicals. To reduce the risk of fire or burns, do not disassemble, crush or puncture the battery.

Recycle or dispose of the battery safely and properly according to local laws and regulations. Do not dispose of the battery in fire or water.

Only use the correct home charger (sold separately) or in-car charger supplied by Mio to charge your Mio internal battery.

Only use your Mio internal battery with your Mio unit.

The Mio battery will stop charging when the ambient temperature is less than 0ºC (32ºF) or more than 45ºC (113ºF).

Failure to adhere to these warnings and cautions may lead to death, serious injury or property damage. Mio disclaims all liability for installation or use of your Mio that causes or contributes to death, injury or property damage or that violates any law.

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Welcome

Thank you for purchasing this Mio. Please read this manual carefully before using your Mio for the first time. Keep this manual in a safe place and use as your first point of reference.

Important information for using the manual

It is important to understand the terms and typographical conventions used in this manual.

Formatting

The following formatting in the text identifies special information:

Convention	Type of Information
Bold	Components or items displayed on screen, including buttons, headings, field names and options.
Italics	Indicates the name of a screen.

Icons

The following icons are used throughout this manual:

Icon	Description
	Note
	Tip
	Warning

Terms

The following terms are used throughout this manual to describe user actions.

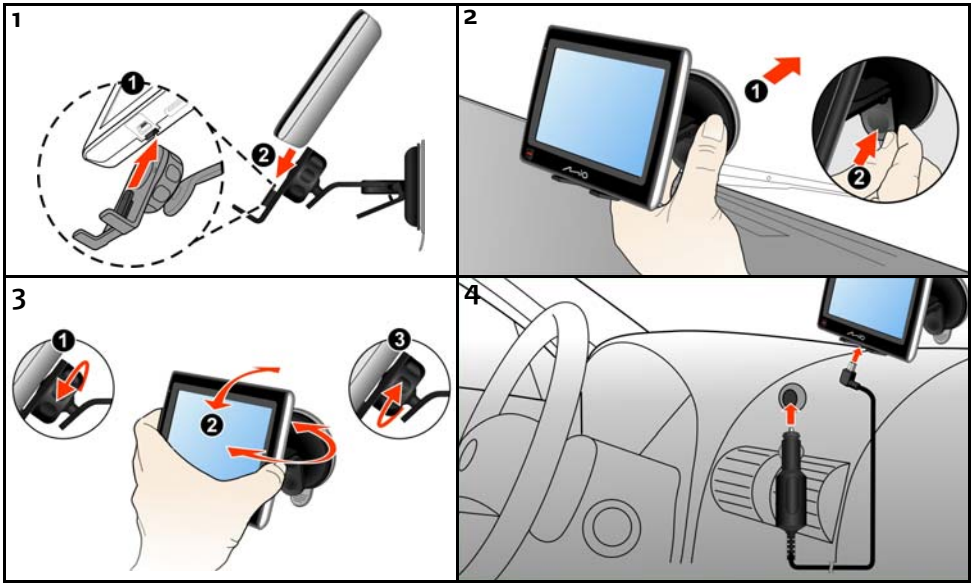
Term	Description
Press	Press and release a button quickly.
Press and hold	Press and hold a button for 2-3 seconds.
Tap	Press and release an item displayed on the touch screen.
Tap and hold	Tap and hold an item displayed on the touch screen for 2-3 seconds.
Select	Tap an item in a list or tap a command from a menu.

Mounting your Mio in a vehicle

CAUTION:

- Never mount your Mio where the driver's field of vision is blocked.
- If the windscreen is tinted with a reflective coating, it may be athermic and impact the GPS reception. In this instance, please mount your Mio where there is a "clear area" - usually just beneath the rear-view mirror.
- To protect your Mio against sudden surges in current, connect the in-car charger only after the car engine has been started.

S300 / S500 / Flat / Navman Spirit Series



Enabling Traffic (TMC) Reception

Traffic information is not available on all models and is only available in selected countries.

Depending on the model of your Mio you can receive live traffic information in one of two ways:

- If your Mio has a built-in TMC receiver, you can receive live traffic information* via the in-car charger which is used as an antenna.
- If your Mio does not have a built-in TMC receiver, you will need to install the TMC accessory kit (may be sold separately - see www.mio.com for details).

For information on using traffic information on your Mio, see the *Software User Manual*.
* Subscription may be required. See www.mio.com for more details.

Getting to know your Mio

S300 Series

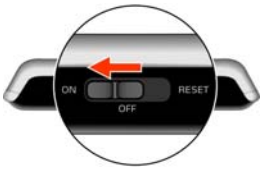
❶	Power switch	❺	Connector for in-car charger, USB cable, home charger (sold separately) and TMC accessory kit (may be sold separately)
❷	Speaker	❻	Main Menu button
❸	Cradle slot	❼	Touch screen
❹	Slot for microSD™ memory card	❽	Battery indicator

S500 / Flat / Navman Spirit Series

❶	Power switch	❻	Touch screen
❷	Cradle slot	❼	Battery indicator
❸	Speaker	❽	Main Menu button
❹	Connector for in-car charger, USB cable, home charger (sold separately) and TMC accessory kit (may be sold separately)	❾	Microphone (not on all models)
❺	Slot for microSD™ memory card		

How do I turn on my Mio?

Using the power switch



To turn on your Mio, slide the power switch to the **ON** position.

- To turn off your Mio, slide the power switch to the **OFF** position, then tap **Sleep**. Your Mio will enter a suspended state. When you next turn it on, your Mio will return to the last screen that you used.

To reset your Mio, slide the power switch to the **RESET** position. When your Mio has turned off, slide the power switch to the **ON** position

To lock the screen, slide the power switch to the **OFF** position, then tap **Lock**.

- To unlock the screen, slide the power switch to the **ON** position, then tap **Unlock**.

How do I charge the battery?

Your Mio has an internal battery that when fully charged, should provide power for up to 2 hours. The battery can take up to 4 hours to fully charge.

The battery may not be fully charged when you use your Mio for the first time.

CAUTION: For optimal performance of the battery, note the following:

- Do not charge the battery when the temperature is high (e.g. in direct sunlight).
- There is no need to fully discharge the battery before charging.
- When leaving your Mio for long periods, slide the power switch to the RESET position to save internal battery power.

The battery indicator light on your Mio indicates the level of internal battery charge:

- Green - battery full
- Orange - battery charging

How do I charge the battery in a vehicle?

To charge your Mio in a vehicle, plug the in-car charger into on the bottom of your Mio and the other end into the vehicle power socket.

How do I charge the battery via my computer?

For optimal charging results, ensure that your Mio is turned off while connected to your computer.

1. Turn on your computer.
2. Plug the large end of the USB cable directly into a USB port on your computer (not a USB hub) and plug the small end into on the bottom of your Mio.

CAUTION: When your Mio is turned on and connected to a computer, it is recognized as an external mass-storage device. Do NOT delete any files that are pre-installed on your Mio. Deleting the files can cause your Mio to crash

How do I charge the battery at home or work?

You can use an optional home charger to charge the battery.

To charge your Mio using a mains power socket, plug the home charger cable into on the bottom of your Mio and the mains power charger into the power socket.

The home charger is not included with all models and may be purchased separately (see www.mio.com for details).

How do I insert a memory card?

CAUTION: Do not apply pressure to the centre of the memory card.

S300 Series

S500 / Flat / Navman Spirit Series

Hold the microSD™ card by the edges and gently insert it into the slot as shown in the above diagrams of your Mio.

- To remove a card, gently push the top edge of the card inwards to release it, then pull it out of the slot.

Other features

How do I make a hands-free call?

Hands-free calling is not available on all models.

If you have a mobile phone with Bluetooth wireless technology, you can use your Mio as a hands-free car kit. Before you can use this feature you must pair your mobile phone with your Mio.

Ensure that the *Bluetooth* wireless feature of your mobile phone is turned on before you begin pairing. Not all phones with Bluetooth wireless technology are compatible with your Mio. For a list of compatible phones, visit www.mio.com

- For information about pairing, making and receiving phone calls, refer to the *Software User Manual*.

How do I search for a place using Connect?

Connect is not available on all models and is only available in selected countries.

Using Connect, you can search online for places near a specific location.

To use Connect, you must pair your Mio with your mobile phone. If your Mio isn't paired with your mobile phone, then the *Bluetooth* screen will display. Not all phones with Bluetooth wireless technology are compatible with your Mio. For a list of compatible phones, visit www.mio.com

- For information about Connect and using Bluetooth wireless, refer to the *Software User Manual*.

How do I receive current traffic information?

Traffic information is not available on all models and is only available in selected countries.

You can receive current traffic information on your Mio using the Traffic Message Channel (TMC) service. The TMC service may require a subscription in some countries. See www.mio.com for details. Depending on your Mio model you may require a TMC accessory kit (may be sold separately).

- For more information about Traffic, refer to the *Software User Manual*.

How do I play music or video?

Media playback is not available on all models and is only available in selected countries.

Using Media you can play music or video files that you have downloaded to your Mio, or from your microSD™ card.

WARNING: The video player feature MUST NOT be used when driving. Using this feature may cause an accident. Please make sure you comply with this warning. Mio accepts NO liability whatsoever in this regard.

- For more information about playing music and video, refer to the *Software User Manual*.

How do I receive audio through my vehicle speakers?

FM transmitting and MP3 are not available on all models and are only available in selected countries.

Your Mio can be set to transmit sound at a particular FM frequency which you can then receive through your vehicle radio. This means that you can hear map voice guidance, mp3 files and video files clearly and loudly through your vehicle speakers.

WARNING: Products with FM Transmitter feature may be operated in the following countries: Andorra, Austria, Belgium, Denmark, Finland, Germany, Ireland, Liechtenstein, Luxembourg, Monaco, the Netherlands, Norway, Portugal, San Marino, Spain, Sweden, Switzerland, United Kingdom and Vatican City. The FM Transmitter is not allowed to be used by law in France, Andorra, San Marino, and Vatican City. Please turn off the FM Transmitter in those areas.

- For more information about FM transmitting, refer to the *Software User Manua*l.

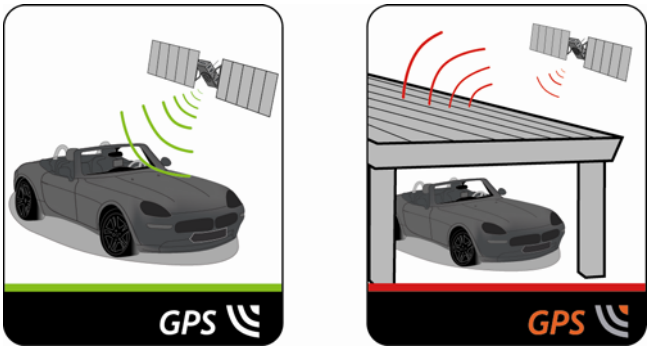
Reference

What is GPS?

The Global Positioning System (GPS) is available at any time, free of charge, and is accurate to within 5m (15ft). GPS navigation is made possible by a network of satellites that orbit the Earth at around 20,200km (12,552mi). Each satellite transmits a range of signals which are utilized by GPS receivers, such as your Mio, to determine an exact location. Although a GPS receiver can detect signals from up to 12 satellites at any time, only four signals are required to provide a position or "GPS fix" (latitude and longitude), for vehicle navigation systems.

How does my Mio receive GPS signals?

Your Mio receives GPS signals via the internal GPS antenna. To guarantee the optimum GPS signal strength, ensure your Mio is outdoors, or in a vehicle outdoors, and has an unobstructed view of the sky. GPS reception is not usually affected by weather, however, very heavy rain or snow may have a negative effect on your reception.



Caring for your Mio

Taking good care of your Mio will ensure trouble-free operation and reduce the risk of damage to your Mio:

- Keep your Mio away from excessive moisture and extreme temperatures.
- Avoid exposing your Mio to direct sunlight or strong ultraviolet light for extended periods of time.
- Do not place anything on top of your Mio or drop objects on your Mio.
- Do not drop your Mio or subject it to severe shock.
- Do not subject your Mio to sudden and severe temperature changes. This could cause moisture condensation inside the unit, which could damage your Mio. In the event of moisture condensation, allow your Mio to dry out completely before use.
- The screen surface can easily be scratched. Avoid touching it with sharp objects. Non-adhesive generic screen protectors designed specifically for use on portable devices with LCD panels may be used to help protect the screen from minor scratches.
- Never clean your Mio when it is turned on. Use a soft, lint-free cloth to wipe the screen and the exterior of your Mio.
- Do not use paper towels to clean the screen.
- Never attempt to disassemble, repair or make any modifications to your Mio. Disassembly, modification or any attempt at repair could cause damage to your Mio and even bodily injury or property damage and will void any warranty.
- Do not store or carry flammable liquids, gases or explosive materials in the same compartment as your Mio, its parts or accessories.

Troubleshooting

If you encounter a problem you cannot solve, contact an authorized service centre for assistance.

Problems	Solutions
Power does not turn on when using battery power.	The remaining battery power may be too low to operate your Mio. Charge the battery using the in-car charger, home charger (sold separately) or USB cable, then try again.
Screen responds slowly.	The remaining battery power may be too low to operate your Mio. If the problem still persists, reset your Mio.
Screen freezes.	Reset your Mio.
Screen is hard to read.	Increase the screen brightness.
Cannot establish a connection with a computer.	Ensure that your Mio and your computer are both turned on before trying to establish a connection. Make sure that the cable is securely plugged into the USB port on your computer and on your Mio. Connect the USB cable directly to your computer, not a USB hub. Reset your Mio before connecting the USB cable. Always disconnect your Mio before you restart your computer.

For more information

Online support

For 24/7 help and support with Mio products, visit our Technical Support website at: www.mio.com

Register your Mio with MioClub

If you have a faulty product or you would like to speak to a member of our Technical Support team, register your Mio on MioClub to obtain the Technical Support phone numbers for your region.

Disclaimer

Mio operates a policy of ongoing development. Mio reserves the right to make changes and improvements to any of the products described in this document without prior notice. Mio does not warrant that this document is error-free. The screenshots and other presentations shown in this manual may differ from the actual screens and presentations generated by the actual product. All such differences are minor and the actual product will deliver the described functionality as presented in this User Manual in all material respects.

Compliance

WARNING This product, its packaging and its components contain chemicals known to the State of California to cause cancer, birth defects or reproductive harm. This Notice is being provided in accordance with California's Proposition 65.

For regulatory identification purposes:

- Moov/Navman Spirit 300 Series is assigned a model number of N223.
- Moov/Navman Spirit 500 Series is assigned a model number of N224.
- Moov/Navman Flat Spirit Series is assigned a model number of N229.

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

Marking labels located on the exterior of your Mio indicate the regulations that your model complies with. Please check the marking labels on your Mio and refer to the corresponding statements in this chapter. Some notices apply to specific models only.

CE

Products with the CE marking comply with Radio & Telecommunication Terminal Equipment Directive (R&TTE) (1999/5/EC), the Electromagnetic Compatibility Directive (2004/108/EC) and the Low Voltage Directive (2006/95/EC) - issued by the Commission of the European Community. Compliance with these directives implies conformity to the following European Standards:

EN 301 489-1: Electronic compatibility and Radio spectrum Matters (ERM), Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements.

EN 301 489-9: (Bluetooth and FM Transmitter): Electromagnetic compatibility and Radio spectrum Matters (ERM), ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 9: Specific conditions for wireless microphones, similar Radio Frequency (RF) audio link equipment, cordless audio and in-ear monitoring devices.

EN 301 489-17: Electronic compatibility and Radio spectrum Matters (ERM), Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for 2.4 GHz wideband transmission systems and 5 GHz high performance RLAN equipment.

EN 300 328 (Bluetooth): Electromagnetic compatibility and Radio spectrum Matters (ERM); Wideband Transmission systems; Data transmission equipment operating in the 2.4 GHz ISM band and using spread spectrum modulation techniques; Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive

EN 301 357-2 (FM Transmitter): Electromagnetic compatibility and Radio spectrum Matters (ERM); Cordless audio devices in the range 25 MHz to 2000 MHz; Part 2: Harmonized EN covering essential requirements of article 3.2 of the R&TTE Directive.

EN 55022: Radio disturbance characteristics

EN 55024: Immunity characteristics

EN 61000-3-2: Limits for harmonic current emissions

EN 61000-3-3: Limitation of voltage fluctuation and flicker in low-voltage supply system

IEC 60950-1:2001: Product Safety

The manufacturer cannot be held responsible for modifications made by the User and the consequences thereof, which may alter the conformity of the product with the CE Marking.

Declaration of conformity

Hereby, Mio Technology declares that this N223/N224/N225/N229 is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

The software is based in part on the work of the Independent JPEG Group.

The software application uses modified versions of the Minimal XML Library, Flickr Library and Python Library. The libraries and their use are covered by the GNU Lesser General Public License (www.gnu.org/licenses/lgpl.html). The modified source code is available from the following URLs:

- Minimal XML Library: http://download.mio.com/opnsource/gnu/mxml/zip
- Flickr Library: http://download.mio.com/opnsource/gnu/FlickrNet.zip
- Python Library: http://download.mio.com/opnsource/gnu/python25.zip

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